(ii) maintaining the reconstructed embryo without activation for a sufficient time to allow the reconstructed embryo to become capable of developing to term;

(iii) activating the resultant reconstructed embryo;

(iv) culturing said activated, reconstructed embryo; and

(v) transferring said cultured, reconstructed embryo to a host non-human mammal of the same species such that the reconstructed embryo develops to term.

21. (NEW) The method of claim 20, wherein the inserted nucleus is from a fibroblast cell.

22. (NEW) The method of claim 20, wherein the inserted nucleus is from an ungulate.

23. (NEW) The method of claim 22, wherein said ungulate is selected from the group consisting of cattle, sheep, goats, water buffalo, camels, pigs, and horses.

24. (NEW) The method of claim 20, wherein the inserted nucleus is from an individual non-human mammal that is live-born.

25. (NEW) The method of claim 20, wherein the oocyte is matured *in vivo* or *in vitro* prior to enucleation.

26. (NEW) The method of claim 20, wherein the oocyte is matured *in vitro* prior to enucleation.

27. (NEW) The method of claim 20, wherein the oocyte is enucleated by physical removal of the metaphase plate.

28. (NEW) The method of claim 20, wherein the oocyte is enucleated at 24 hours after onset of *in vitro* maturation.

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29. (NEW) The method of claim 20, wherein the oocyte is matured *in vivo* prior to enucleation.

30. (NEW) The method of claim 20, wherein the non-human mammal is bovine.

31. (NEW) The method of claim 20, wherein the inserted nucleus has been genetically modified.

32. (NEW) A method of cloning a non-human mammalian fetus by nuclear transfer comprising:

(i) inserting a nucleus of a non-human mammalian differentiated somatic cell, which has passed start in the mitotic cell cycle and is in the G1 phase of the cell cycle, into an unactivated, metaphase II-arrested, non-human mammalian enucleated oocyte of the same species to reconstruct an embryo;

(ii) maintaining the reconstructed embryo without activation for a sufficient time to allow the reconstructed embryo to become capable of developing to term;

(iii) activating the resultant reconstructed embryo;

(iv) culturing said activated, reconstructed embryo; and

(v) transferring said cultured, reconstructed embryo to a host non-human mammal of the same species such that the reconstructed embryo develops into a fetus.

33. (NEW) The method of claim 32, wherein the inserted nucleus is from a fibroblast cell.

34. (NEW) The method of claim 32, wherein the inserted nucleus is from an ungulate.

35. (NEW) The method of claim 34, wherein said ungulate is selected from the group consisting of cattle, sheep, goats, water buffalo, camels, pigs, and horses.

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36. (NEW) The method of claim 32, wherein the inserted nucleus is from an individual non-human mammal that is live-born.

37. (NEW) The method of claim 32, wherein the oocyte is matured *in vivo* or *in vitro* prior to enucleation.

38. (NEW) The method of claim 32, wherein the oocyte is matured *in vitro* prior to enucleation.

39. (NEW) The method of claim 32, wherein the oocyte is enucleated by physical removal of the metaphase plate.

40. (NEW) The method of claim 32, wherein the oocyte is enucleated at 24 hours after onset of *in vitro* maturation.

41. (NEW) The method of claim 32, wherein the oocyte is matured *in vivo* prior to enucleation.

42. (NEW) The method of claim 32, wherein the non-human mammalian fetus is bovine.

43. (NEW) The method of claim 32, wherein the inserted nucleus has been genetically modified. --

REMARKS

Reconsideration of this application is respectfully requested.

New claims 20-43 are derived from canceled claim 19 and are fully supported by the specification, for example, as follows:

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